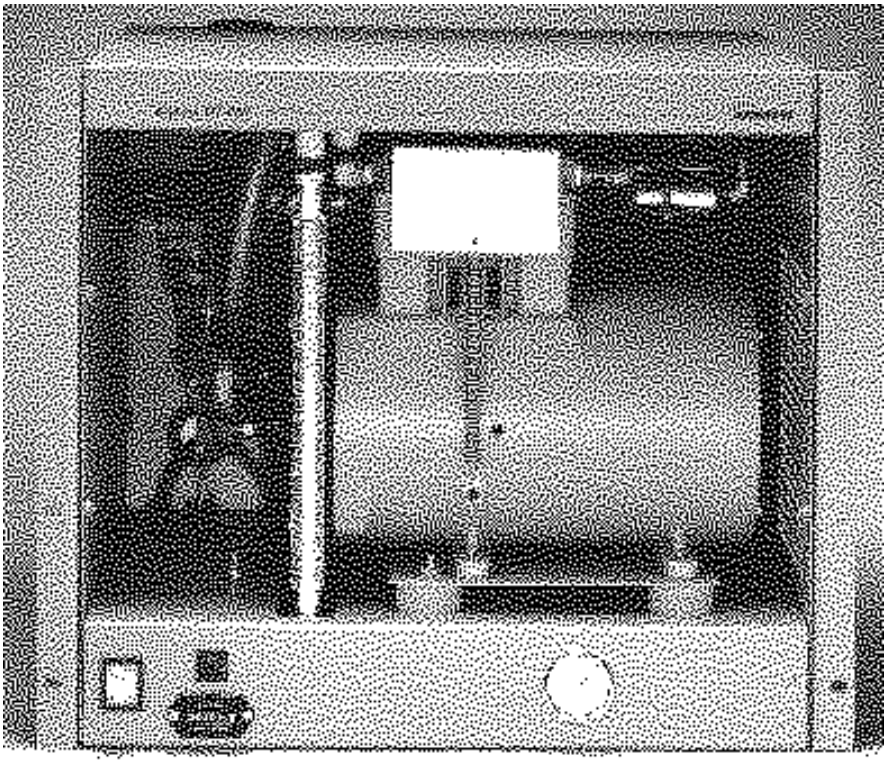
MT-600 Series Dehydrators

Installation/Operator's Manual



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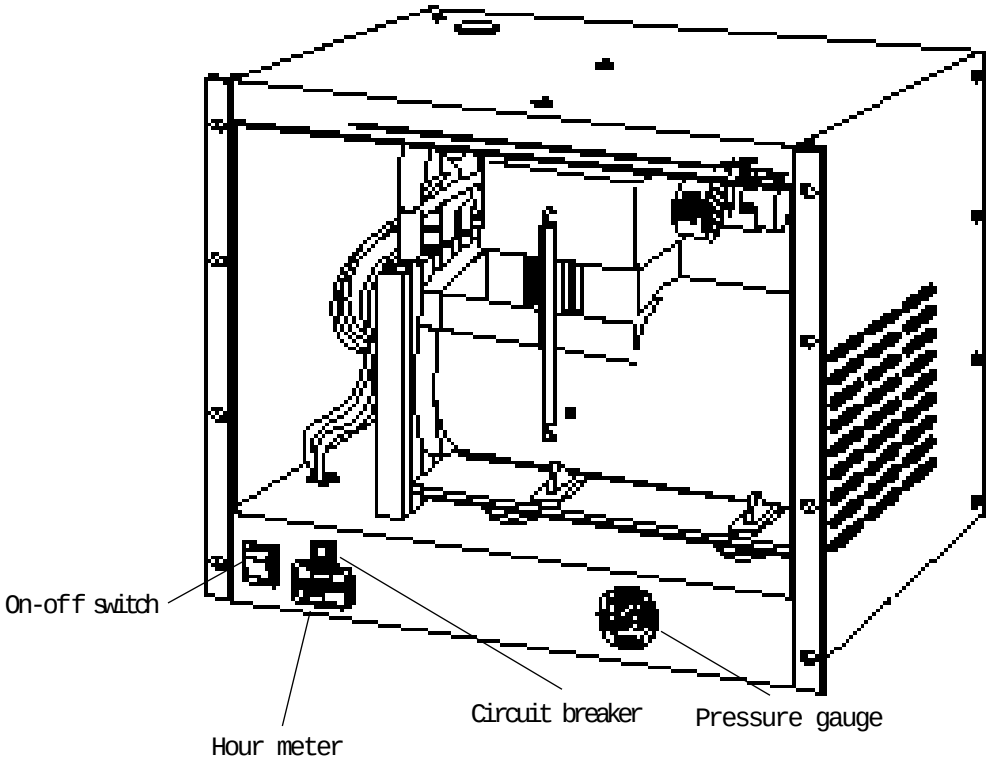
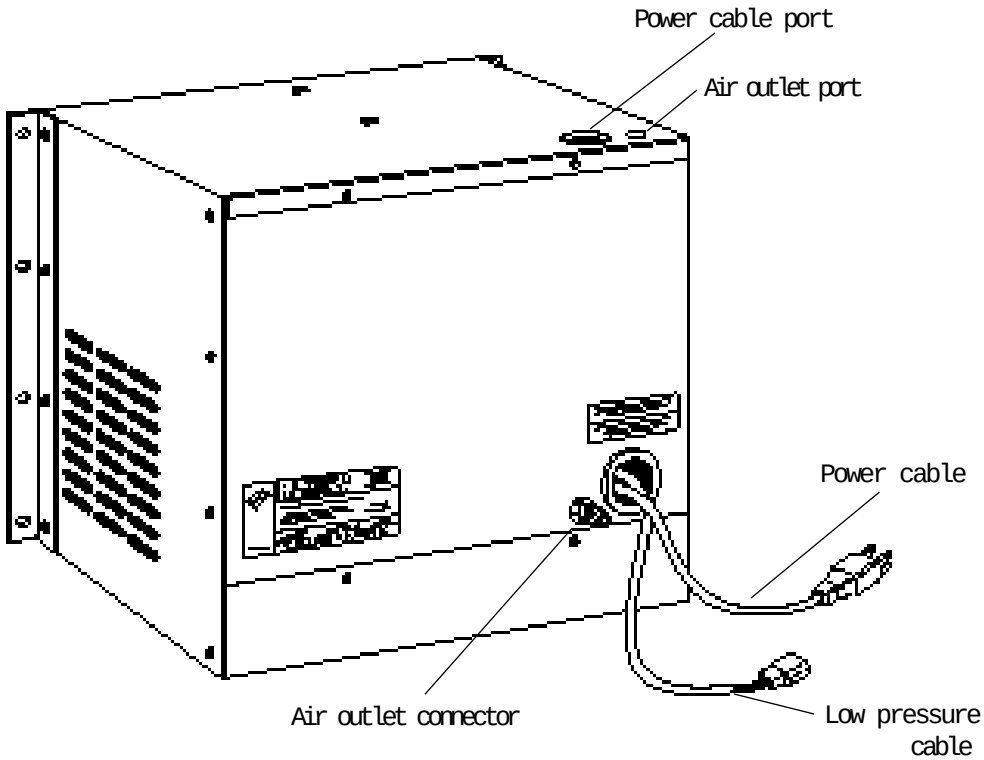
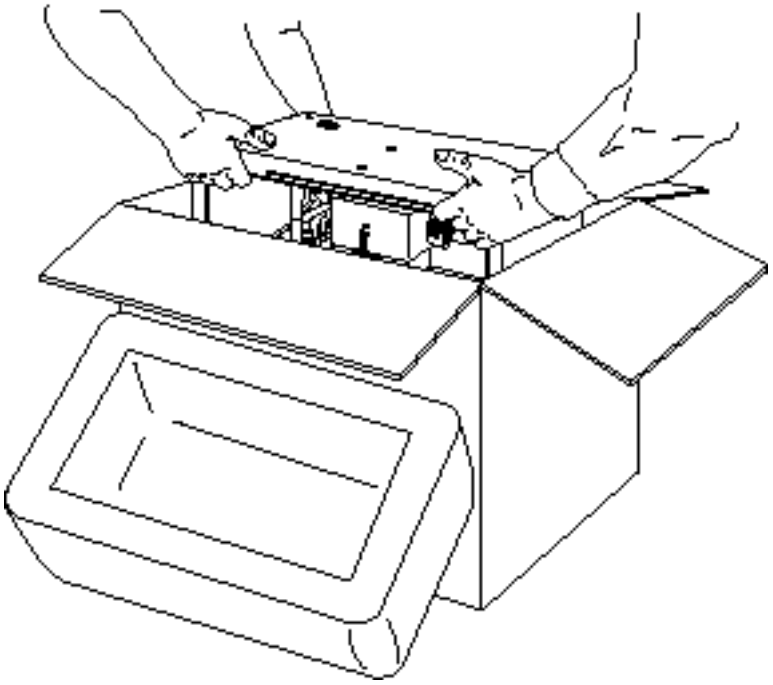
Dehydrator Controls, Indicators and Connectors





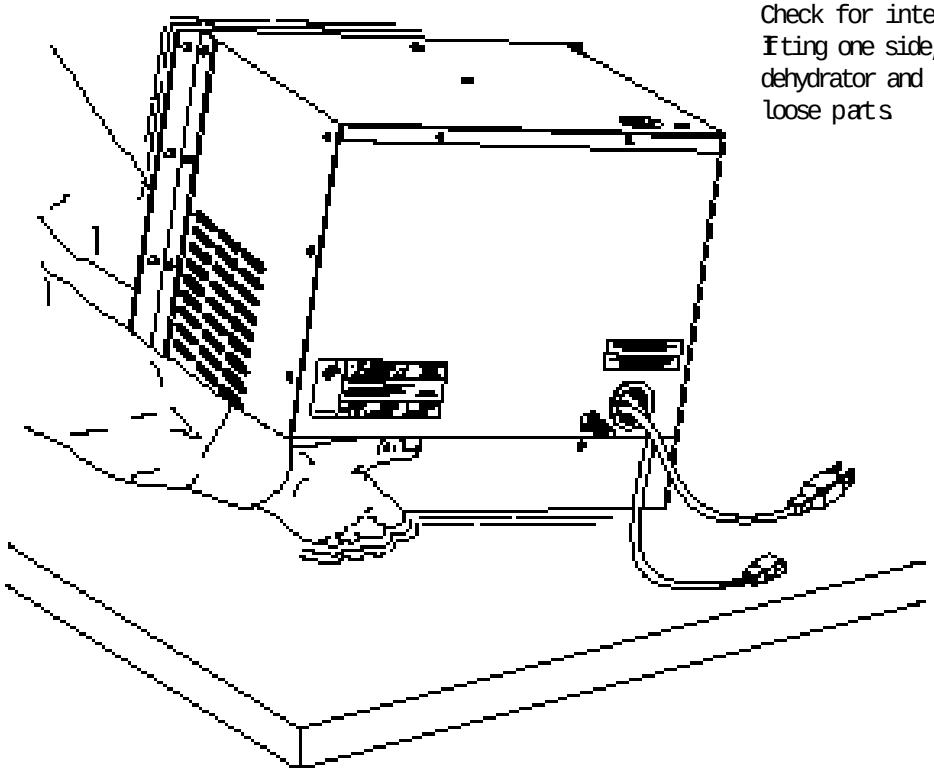
Unpacking and Inspecting the Dehydrator

1 Check for shipping damage



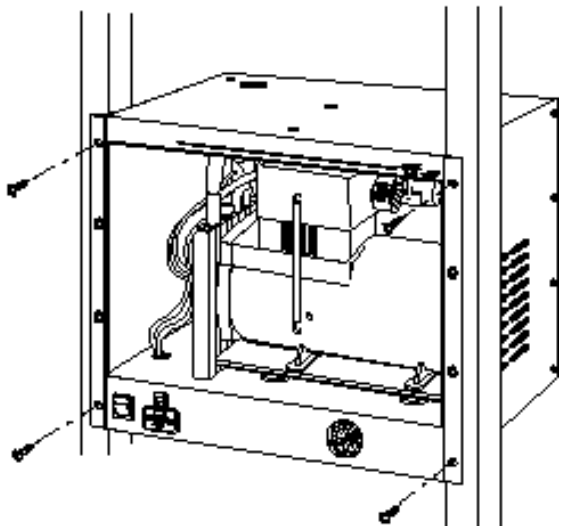
Check for external damage such as dents and broken parts. Keep packing materials as evidence for carrier.

Note: Dehydrator weighs 68 lb (31kg). Two persons are required to unpack.



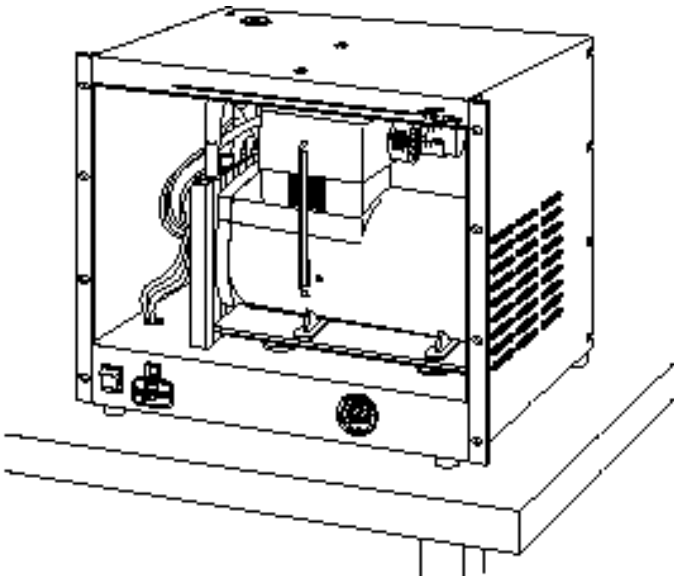
Check for internal damage by lifting one side, shaking the dehydrator and listening for loose parts.

2 Mount dehydrator

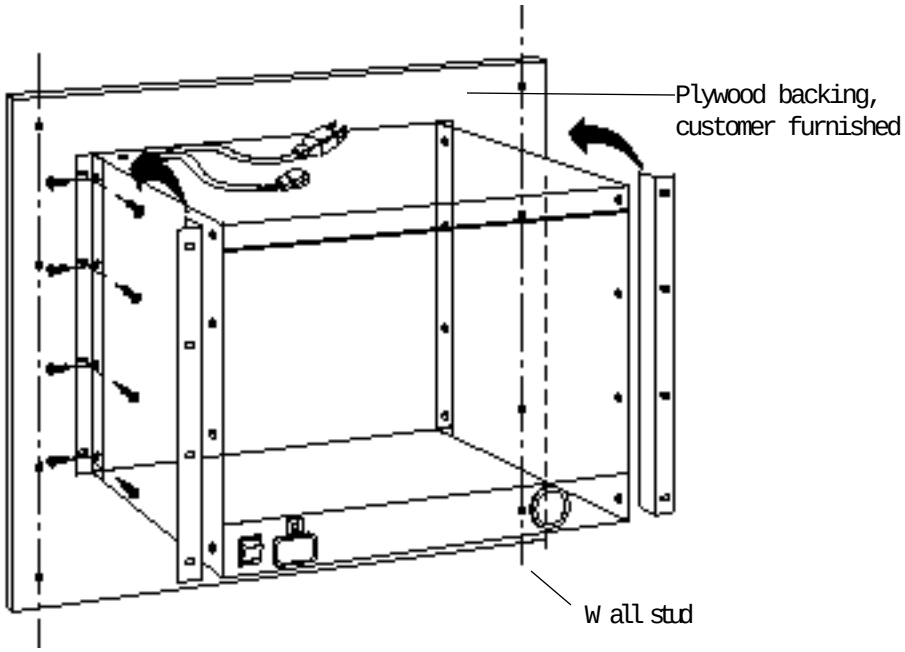


19" Rack mounted

Note: Dehydrator weighs 68 lb (31 kg). Two persons are required for rack and wall mounting.



Bench mounted

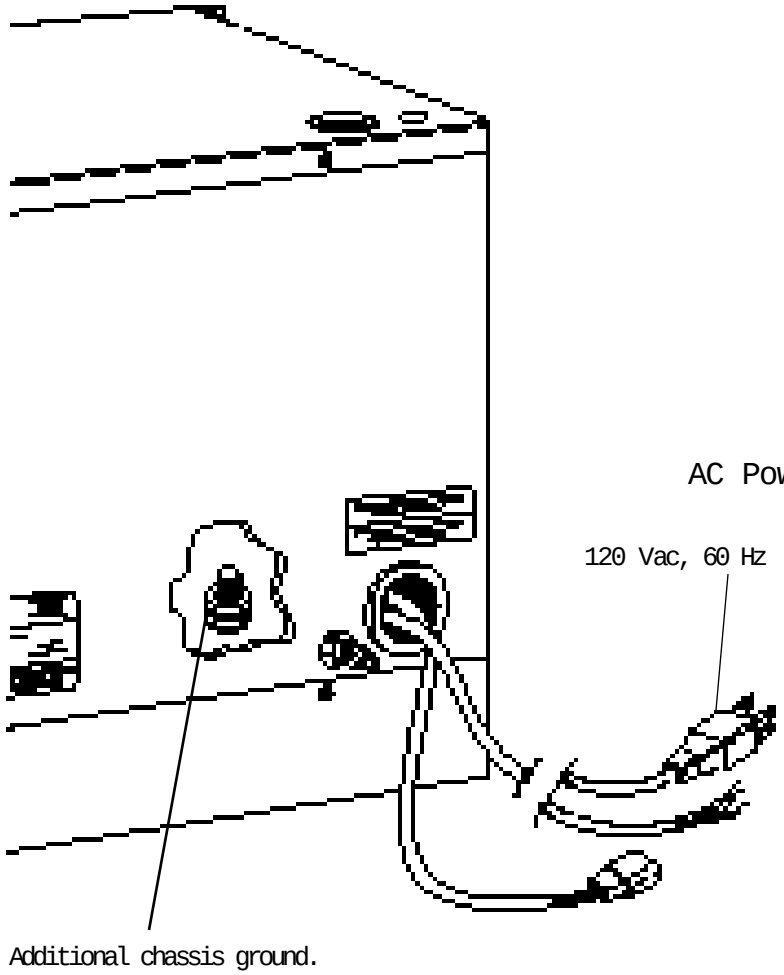


Wall mounted

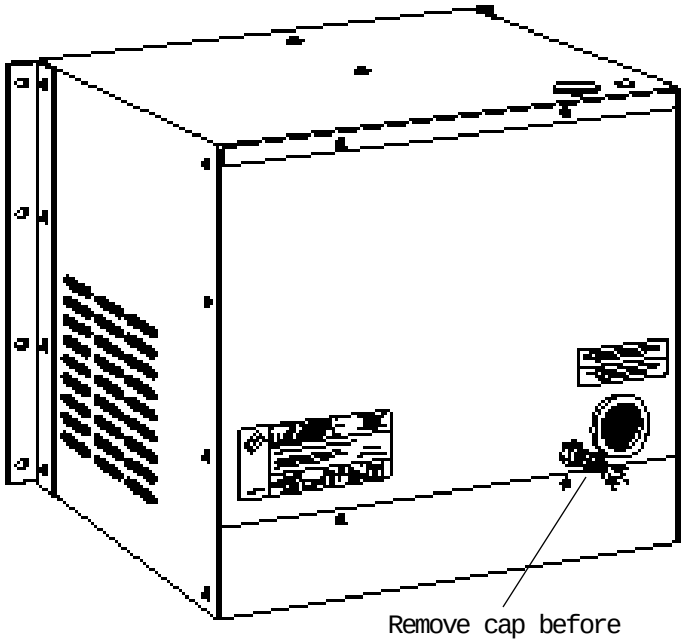
3 Connect power to rack system mains distribution bus

WARNING

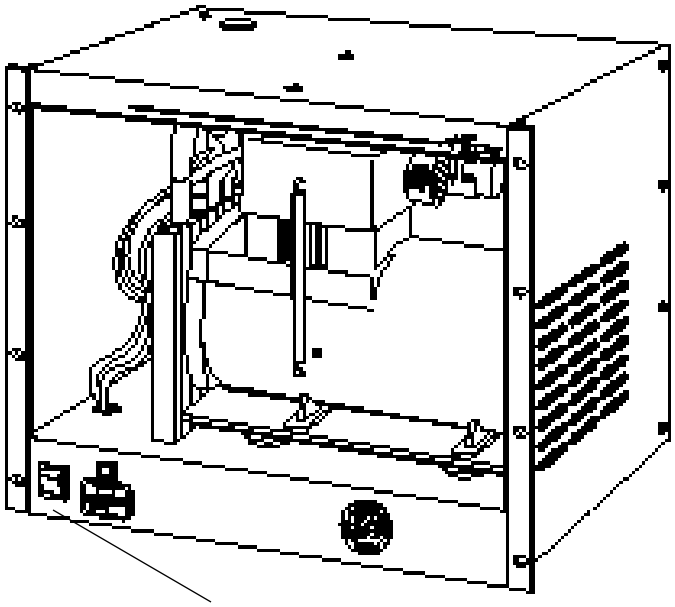
Power supplied to the dehydrator requires a 15-ampere external fuse. Improper installation of ground wiring can result in the risk of electric shock. Consult a qualified electrician if you have any doubt about your present electrical grounding.


AC Power Connection
120 Vac, 60 Hz U.S.A. Plug
230 Vac, 50 Hz
Stripped Leads for In-Country Mains Plug:
Line - brown wire
Neutral - blue wire
Ground - green wire with yellow stripe
Additional chassis ground.

4 Test dehydrator

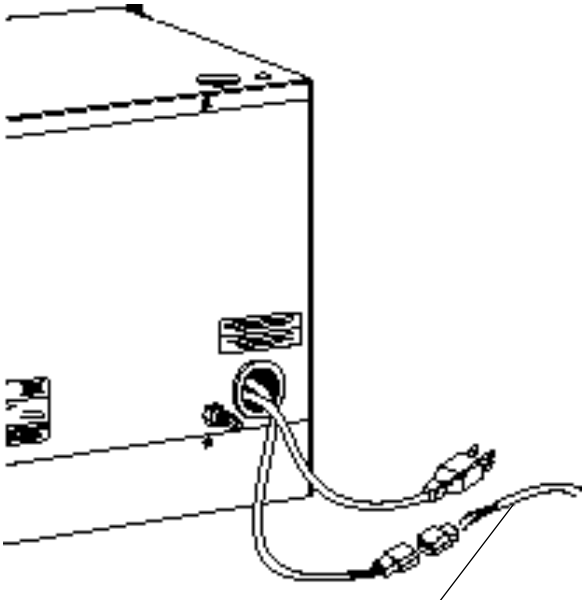


Remove cap before applying power



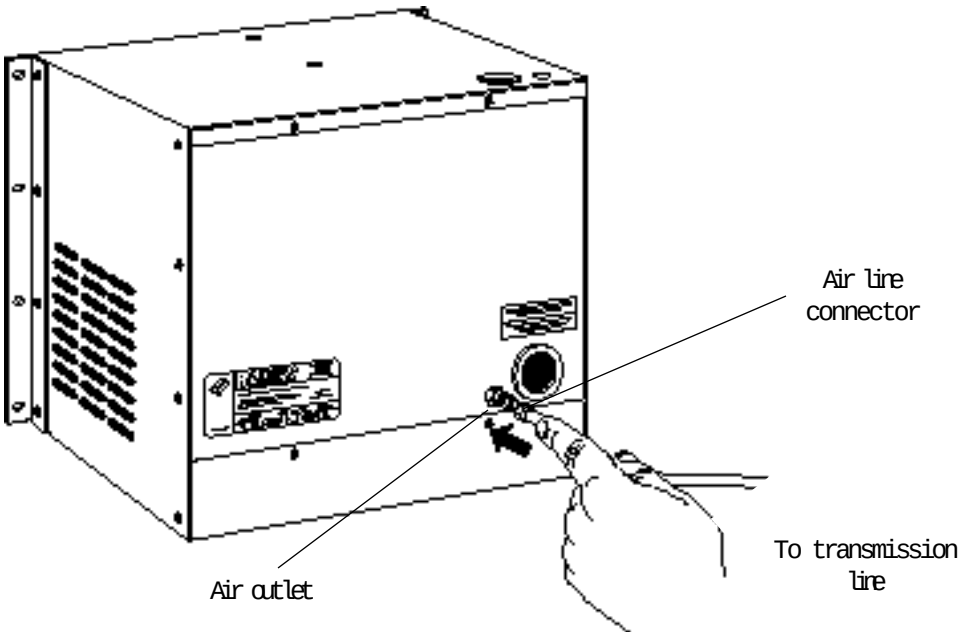
Apply power - 20 second time delay before dehydrator operates.

5 Connect low pressure alarm output



Customer alarm wire. Power off before making connection.

6 Connect air outlet



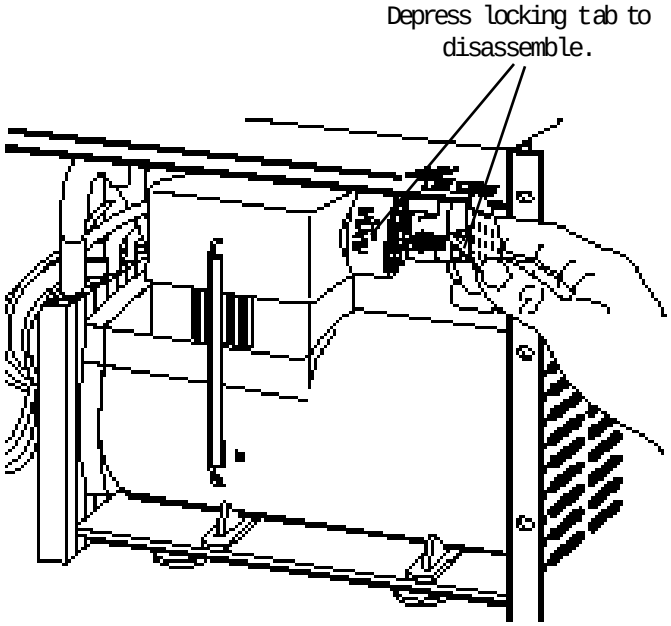
7 Purge transmission line

Open far end of transmission line.

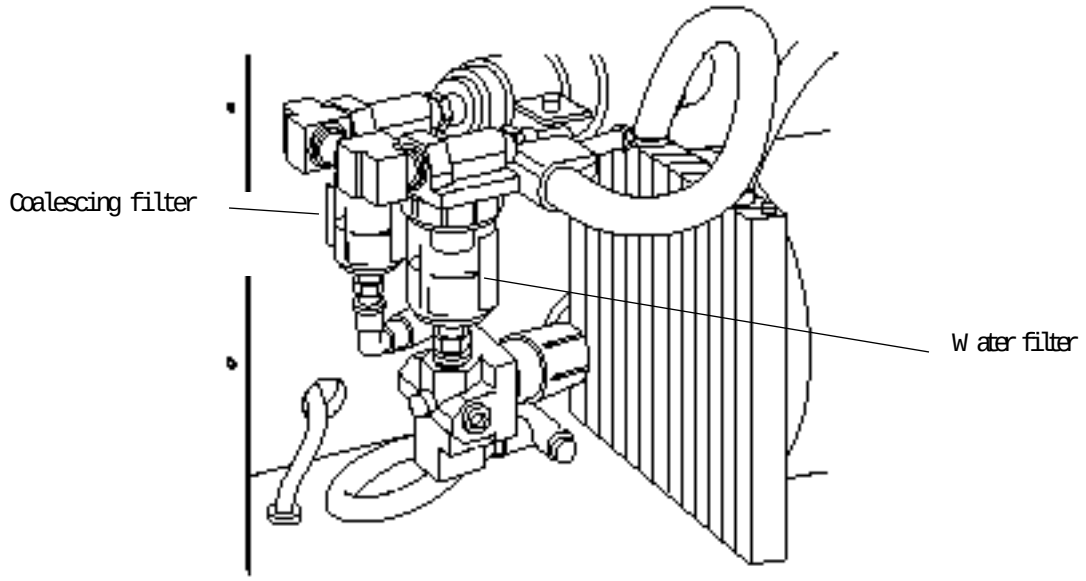
Operate dehydrator for 10 hours and then close the transmission line.

If this is not possible, pressurize the line and allow it to stabilize one hour. Bleed the system at a junction (not at the dehydrator). Repeat this procedure twelve times.

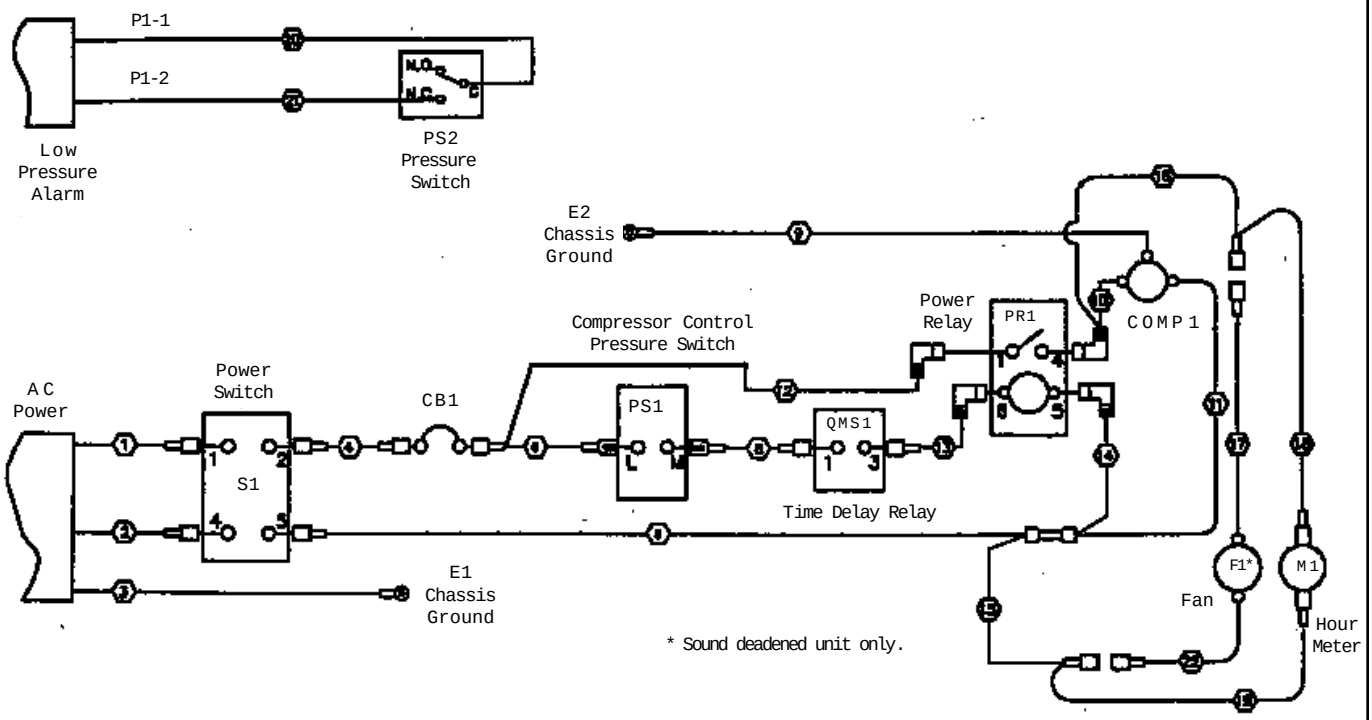
Replacing air filter element



Identification of coalescing and water filters

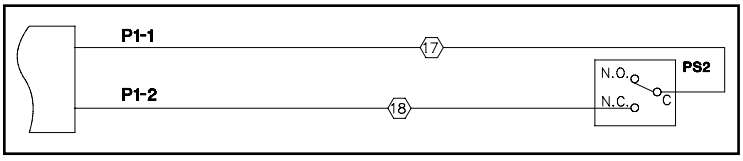


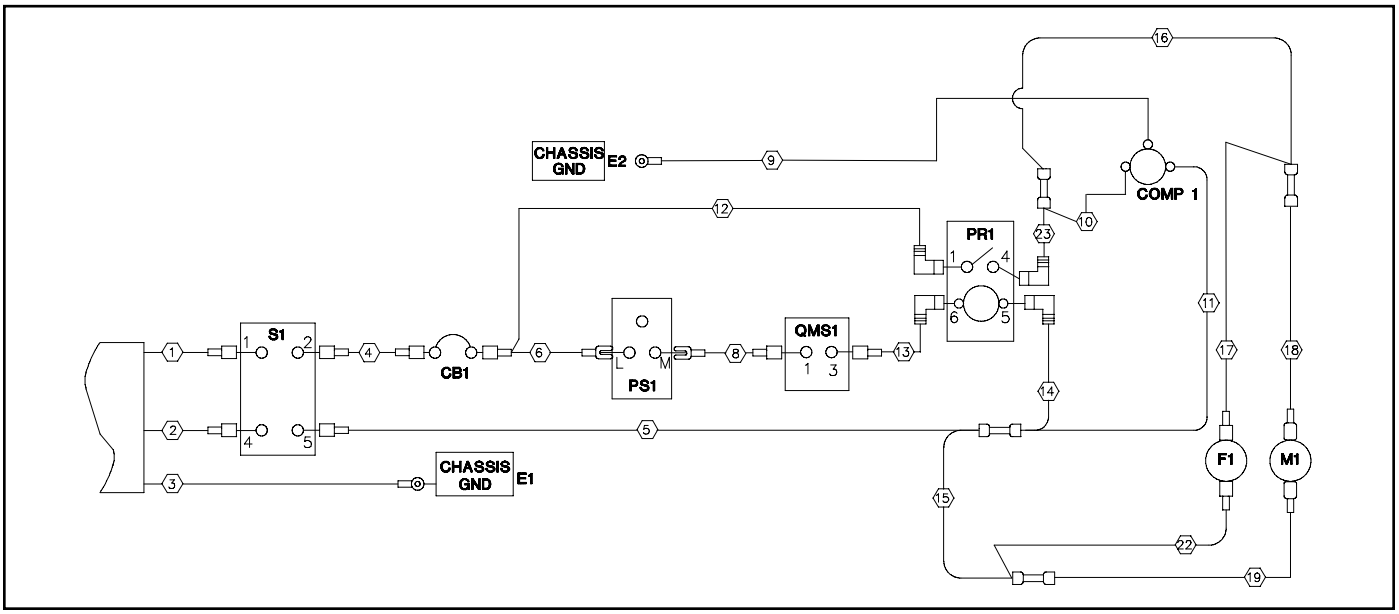
Schematic Diagram

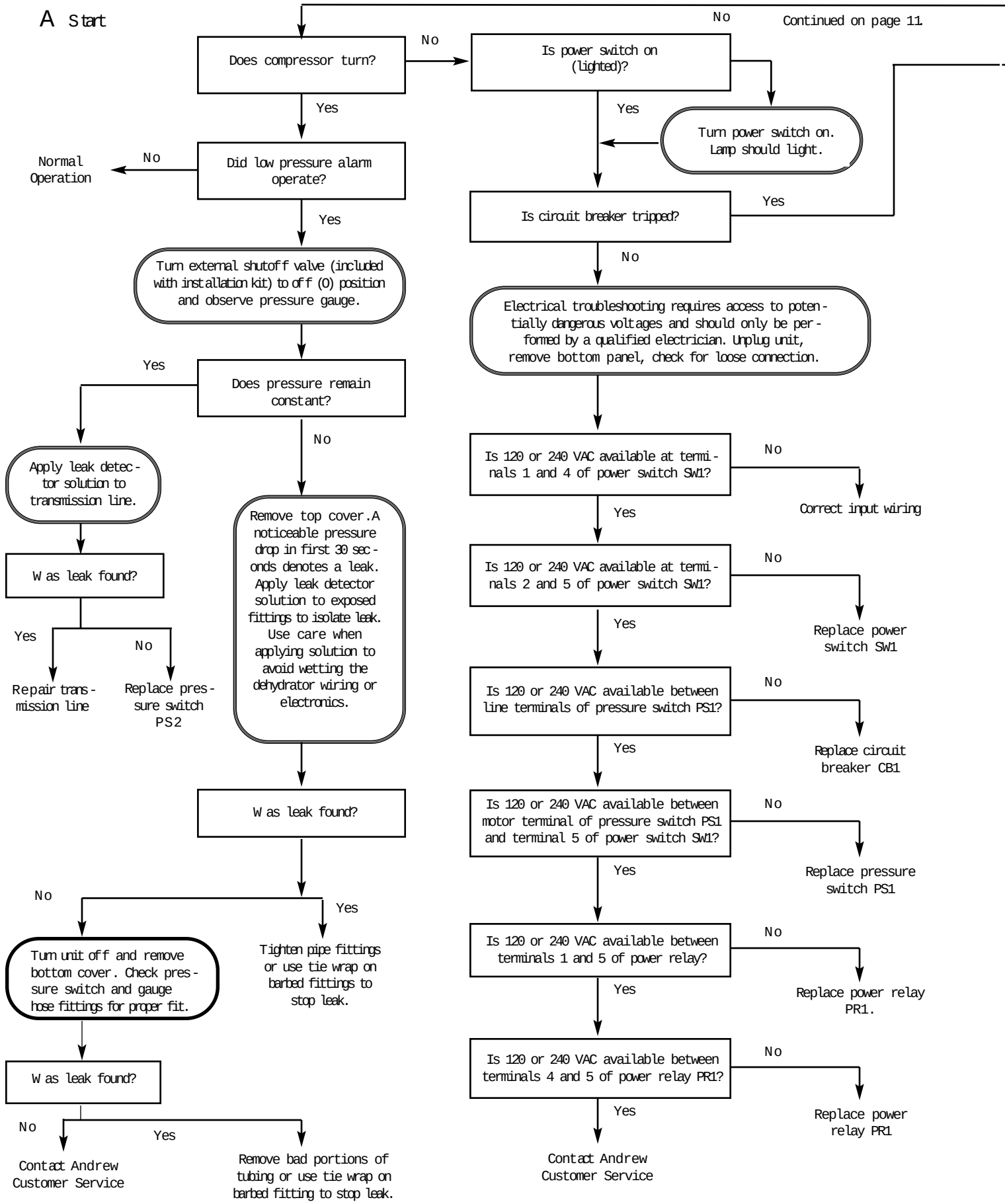


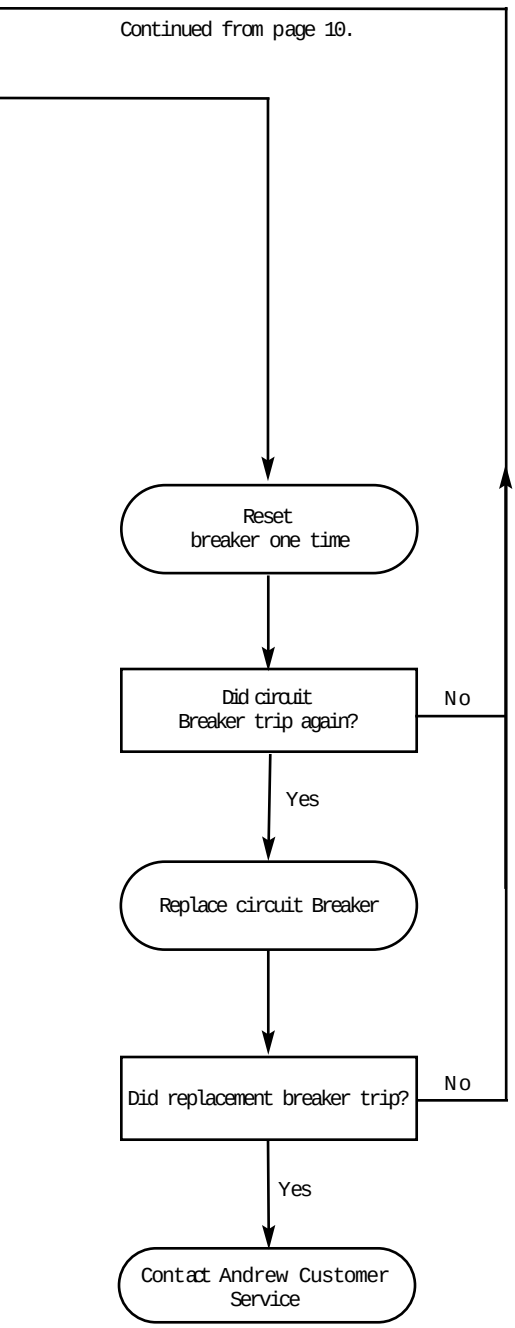
Wire Colors

1	Brn	8	Red	14	Wht	20	Blk
2	Blu	9	Grn	15	Wht	21	Red
3	Grn/Yel	10	Blk	16	Red	22	Blk
4	Red	11	Wht	17	Blk		
5	Wht	12	Red	18	Red		
6	Red	13	Red	19	Wht		



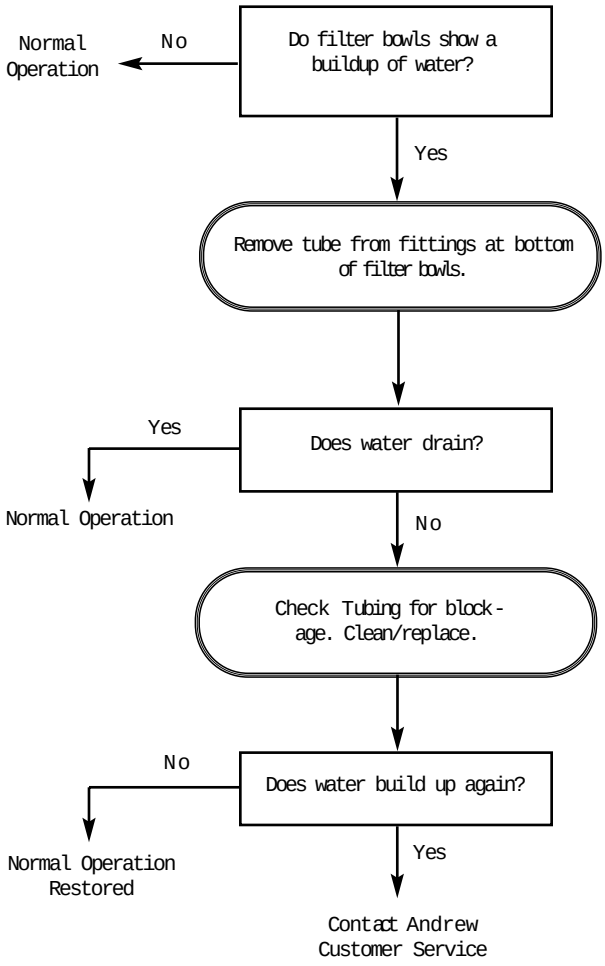



A Start
Does compressor turn?
No
Is power switch on (lighted)?
No
Continued on page 11.
Yes
Turn power switch on. Lamp should light.
Yes
Did low pressure alarm operate?
No
Normal Operation
Yes
Is circuit breaker tripped?
Yes
No
Turn external shutoff valve (included with installation kit) to off (0) position and observe pressure gauge.
Electrical troubleshooting requires access to potentially dangerous voltages and should only be performed by a qualified electrician. Unplug unit, remove bottom panel, check for loose connection.
Does pressure remain constant?
Yes
No
Apply leak detector solution to transmission line.
Was leak found?
Yes
No
Repair transmission line
Replace pressure switch PS2
Remove top cover. A noticeable pressure drop in first 30 seconds denotes a leak. Apply leak detector solution to exposed fittings to isolate leak. Use care when applying solution to avoid wetting the dehydrator wiring or electronics.
Was leak found?
No
Yes
Turn unit off and remove bottom cover. Check pressure switch and gauge hose fittings for proper fit.
Tighten pipe fittings or use tie wrap on barbed fittings to stop leak.
Was leak found?
No
Yes
Contact Andrew Customer Service
Remove bad portions of tubing or use tie wrap on barbed fitting to stop leak.
Is 120 or 240 VAC available at terminals 1 and 4 of power switch SW1?
No
Correct input wiring
Yes
Is 120 or 240 VAC available at terminals 2 and 5 of power switch SW1?
No
Replace power switch SW1
Yes
Is 120 or 240 VAC available between line terminals of pressure switch PS1?
No
Replace circuit breaker CB1
Yes
Is 120 or 240 VAC available between motor terminal of pressure switch PS1 and terminal 5 of power switch SW1?
No
Replace pressure switch PS1
Yes
Is 120 or 240 VAC available between terminals 1 and 5 of power relay?
No
Replace power relay PR1.
Yes
Is 120 or 240 VAC available between terminals 4 and 5 of power relay PR1?
No
Replace power relay PR1
Yes
Contact Andrew Customer Service

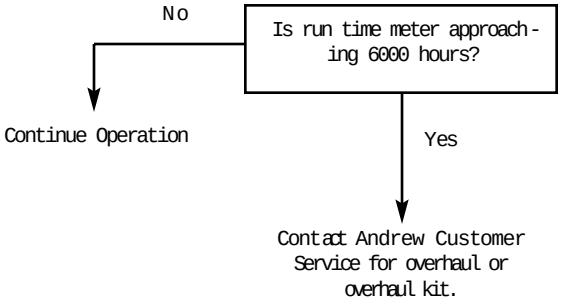


B Water and Coalescing Filter Bowls

Refer to page 8 for identification of water and coalescing filters.



C Compressor Overhaul


Is run time meter approaching 6000 hours?
No
Continue Operation
Yes
Contact Andrew Customer Service for overhaul or overhaul kit.

Description	Type Number
Compressor	
115 V, 60 Hz	ECPRS-24300
220 V, 50 Hz	ECPRS-34300
Power Switch (S1)	
115 V	ESWRK-31250
220V	AE01J-A0129-006
Circuit Breaker (CB1)	EBREK-11576
Power Relay (PR1)	
115 V	ERLYP-13163
220 V	ERLYP-13183
Pressure Switch (PS1)	ESWPR-11100
Pressure Switch (PS2)	ESWPS-11200
Time Delay Module, 20 second (QMS1)	
115 V	ETMDM-11200
220 V	ETMDM-12200
Air Intake Filters, bag of 6	AE01K-B0518-002
Air Intake Filter, complete cartridge assembly	EFLTR-20202
Dehydrator Overhaul Kit, for dehydrator equipped with green Wilkerson filters	
115 V	AE01K-C0398-002
220 V	AE01K-C0398-003
Coalescing Filter, complete assembly	EFLTA-12200
Coalescing Filter Bowl	EFLTA-94030
Coalescing Filter Element	EFLTA-93020
Water Filter, complete assembly	EFLTA-52100
Water Filter Bowl	EFLTA-94030
Water Filter Element	EFLTA-91010

Description	Type Number
Back Pressure Regulator	EVLVR-11000
Condensate Seal Assembly	AE01A-C0770
Condensate Seal Assembly Tube Fitting	EFTGS-30223
Cooling Fan, sound deadened unit	
115 V, 60 Hz	EFANS-11105
220 V, 50 Hz	EFANS-12105
1/4" Tubing, clear, specify 3.5 feet	ETUBE-20201
1/4" Tubing, black, specify 20 feet	25435-4
3/8" Tubing, black, specify 20 feet	25435-5
Low Pressure Alarm Cable	AE01C-D0482-002
Pressure Gauge	EGAUG-42100
Compressor Isolators	AE01D-B0874-001
Isolator Bushings	AE01D-C0861-001
Power Cable	
115 V	ECABP-12213
220 V	AE01J-A0738-051
Power Cable Strain Relief	ECABB-21110
Heat Exchanger	AE01M-D0214-001
High Temperature Hose, compressor to heat exchanger, specify 0.5 ft	EHOSE-21002
Low Temperature Hose, heat exchanger to water filter, specify 1.5 ft	EHOSE-33002
Hose Clamps, high and low temp. hoses	ECLMP-20090

Technical Data

Output Pressure (approx.)	8 lb/in^2 (510 mbar) (51 kPa)
Output Capacity (total, approx.)	
at 95% RH and 49 C (120 F)	36 ft^3/h (0.6 SCFM) (1020 l/h)
Output Dew Point, minimum	
at 95% RH and 49 C (120 F)	-45 C (-50 F)
Ambient Operating Temperature:	0 - 49 C (32 - 120 F)
Low Pressure Alarm Set Point (approx.)	1.0 lb/in^2 (68 mbar) (7 kPa)
Electrical Power	
115 VAC, 60 Hz	780 W
220 VAC, 50 Hz	720 W
Mains Breaker Size	15 amp
Air Output Connector	3/8" compression single output with shut-off valve
Dimensions, 9 RU:	
Height	15.72 in (399 mm)
Width	19 in (482 mm)
Depth	13.5 in (343 mm)
Net Weight	68 lb (31 kg)

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